I CLAIM:

1. An intermediate base for a module having at least one semiconductor component, said base comprising a flat base body having an upper face on which internal connections are formed for connection to connecting elements of a semiconductor component, a lower face which is provided with external connections for making contact with a circuit carrier, and through-holes between the upper face and the lower face, said through-holes having walls which are at least partially metallized to make a conductive connection between an internal connection on the upper face and a corresponding external connection on the lower face, the walls of the through-holes being at least partially exposed in the region of the lower face of the base body by means of annular notches which are incorporated adjacent to a circumferential edge of the through-holes to form freestanding studs as external connections.

2. ~~An~~ The intermediate base according to claim 1, wherein annular notches are concentric to form tubular studs.

3. ~~An~~ The intermediate base according to claim 1, wherein at least one of the notches is eccentric so that the stud associated therewith is approximately in the form of a tubular segment.

4. ~~An~~ The intermediate base according to claim 1, wherein the base body is a film composed of a plastic material whose coefficient of expansion is approximately the same as the coefficient of expansion of the semiconductor component.

5. ~~An~~ The intermediate base according to claim 4, wherein the film is composed of liquid crystal polymer.

6. ~~An~~ The intermediate base according to claim 1, wherein the external connections are in the form of metal layers on an outer rim of the studs.

B 7. ~~An~~ The intermediate base according to claim 6, wherein the external connecting elements have an additional solder layer.

B 8. ~~An~~ The intermediate base according to claim 6, wherein the through-holes are at least partially filled with a solder material.

B 9. ~~An~~ The intermediate base according to claim 1, wherein the internal connections on the upper face of the base body are formed by a metal layer on the component connecting elements of a semiconductor component which is connected to the upper face, with a metal layer continuously covering both the walls of the through-hole and the contact surface of the component connecting element which faces the through-hole.

10. A semiconductor module comprising a semiconductor chip and an intermediate base, said intermediate base having a flat base body having an upper face on which internal connections are formed for connection to connecting elements of the semiconductor chip, said flat base body having a lower face which is provided with external connections for making contact with a circuit carrier, and through-holes extending between the upper face and the lower face, said through-holes having walls which are at least partially metallized for making a conductive connection between an internal connection on the upper face and a corresponding external connection on the lower face, the walls of each of the through-holes being at least partially exposed in the region of the lower face of the base body by means of annular notches which are incorporated adjacent a circumferential edge of the through-hole to form a freestanding stud as an external connection.

11. A method for producing an intermediate base for at least one semiconductor component comprising the steps of connecting a side of a semiconductor component having connecting contact elements on an upper face of a base body; drilling holes through the base body from the lower face as far as the upper face in order to expose the component connecting elements of the semiconductor component; coating the inner walls of the through-holes and exposed surfaces of the component connecting elements with a metal layer; and forming a

circumferential notch around the rims of each of the through-holes on the lower face of the base body to produce a stud.

12. A method according to claim 11, wherein the step of forming the notches for exposing the hole rims utilizes laser processing.

13. A method according to claim 11, wherein the step of forming the notches first stamps the notches into the lower face of the base body prior to the step of fixing the component onto the upper face of the base body, then drilling the through-holes from the lower face and subsequently coating the through-holes and exposed component connecting elements with the metal layer.

14. A method according to claim 11, which includes partially removing a portion of the metal layer applied to the lower face of the base body to produce a conductor track structure.

15. A method according to claim 11, which includes at least the rims of the studs being provided with a solder metallization.